Public Notice

US Army Corps
of Engineers®
Walla Walla District
201 North Third Avenue
Walla Walla, WA 99362-1876

PUBLIC NOTICE NO: CENWW-PM-PD-E 03-01

Corps of Engineers Civil Works Action:

LOWER SNAKE AND CLEARWATER RIVERS
Winter Maintenance Dredging 2004-2005
Washington and Idaho

PUBLIC NOTICE DATE: December 17, 2003
COMMENTS DUE DATE: January 17, 2004

30-day Notice

Interested parties are hereby notified that the Walla Walla District of the U.S. Army Corps of Engineers (Corps) proposes an activity that is subject to the provisions of Section 404 of the Clean Water Act of 1977 (Public Law 95-217). The Clean Water Act requires that all civil works projects be evaluated as to the effect of discharge of dredged or fill material into waters of the United States prior to making the discharge. The Corps is circulating this public notice in accordance with 33 CFR 337.

LOCATION: The Corps proposes to perform maintenance dredging activities at nine locations in the Lower Granite and Little Goose Reservoirs on the lower Snake and Clearwater rivers in Washington and Idaho (Figure 1). Specific locations are listed below in Table 1:

Table 1 – Dredging sites, quantities of dredged material and sediment type

Site to be Dredged and River Mile (RM)	Quantity to be Dredged (cubic yards)	Sediment Type (calculated median amount)
Federal Navigation Channel at Confluence of Snake and Clearwater Rivers (Snake River RM 138 to Clearwater RM 2)	250,500	99% sand
Port of Clarkston (Snake RM 139)	9,600	91% sand
Port of Lewiston (Clearwater RM 1 – 1.5)	5,100	57% sand, 43% silt
Greenbelt Boat Basin (Snake RM 139.5)	2,800	45% sand, 35% silt
Swallows Park Swim Beach/Boat Basin Snake RM 141.7 and 141.9)	11,000/5,000	69% sand, 31% silt
Lower Granite Navigation Lock Approach (Snake RM 107)	4,000	2-6 inch cobbles
Lower Monumental Navigation Lock Approach (Snake RM 41.5)	20,000	2-6 inch cobbles
Illia Boat Launch (Snake RM 104)	1,400	83% sand, 15% silt
Willow Landing Boat Launch (Snake RM 88)	6,200	24% sand, 76% silt
	Total 315,600	

Disposal of the dredged materials is proposed at an in-water location in Lower Granite Reservoir. The proposed discharge site is located at River Mile 116 near Knoxway Canyon on the left bank of the Snake River in Washington (Figures 1 and 2).

PROJECT DESCRIPTION: The purpose of the maintenance dredging is to restore the authorized depth of the Federal navigation channel, remove sediment from port areas, and provide for recreational use. The Corps proposes to perform the dredging during the 2004 – 2005 winter in-water work window, which is currently identified as December 15 through March 1.

Dredging would be accomplished using mechanical methods such as clamshell, dragline, or backhoe. Based on previous dredging activities, the method to be used would likely be clamshell for large open areas such as the main navigation channel and port areas, and backhoe for the smaller boat basins. Material would be scooped from the river bottom and loaded onto barges for transport to the disposal site.

Description of Disposal Method:

The Corps plans to use the dredged material for beneficial use. This use is consistent with Corps policy to secure the maximum practicable benefits through the use of material dredged from navigation channels, consistent with available authorities. The Corps proposes to use in-water disposal to accomplish two goals: (1) provide a planting bench for the establishment of riparian habitat; and

(2) create shallow and mid-depth habitat for juvenile salmon. The in-water disposal site at RM 116 was selected because it is on the inside of a river bend, has suitable water velocities and underwater contours to facilitate habitat creation, and is configured so the dredged material can be deposited without burying known cultural resource sites. Disposal of dredged material at this site in 2004-2005 would provide about 1.3 acres to be used as a planting bench for riparian habitat and about 4 acres of shallow water habitat for juvenile salmon.

Inundation of the lower Snake River canyon by the Corps' reservoirs destroyed many acres of riparian habitat. The Corps is replacing riparian habitat as part of the Lower Snake River Fish and Wildlife Compensation Plan. Although some riparian habitat has been re-established, more is needed to replace what was lost. The Corps proposes to use the material from this dredging activity to construct a planting bench and establish riparian vegetation to help mitigate the loss of the original habitat.

As part of the in-water disposal, the Corps would also construct a submerged, gently sloping bench adjacent to the woody riparian bench. The submerged bench would be designed to provide shallow water habitat for resting and rearing by juvenile salmonids. Studies conducted by David Bennett, Ph.D. of the University of Idaho on the lower Snake River from 1988 to 1993 indicated that a substrate of sand, gravel, and/or cobble provided suitable habitat for juvenile salmon while silt substrate provided little benefit. These studies showed that juvenile fall Chinook salmon prefer shallow, open sandy areas along shorelines for rearing. The studies also showed that fall Chinook salmon used the shallow-water habitat created with in-water disposal of dredged material that surrounds Centennial Island (in Lower Granite reservoir near RM 120). In some years, as many as 10 percent of the total sample of subyearling Chinook salmon from the Lower Granite reservoir originated from the habitat created by in-water disposal. Fall Chinook salmon were most commonly collected over lower gradient shorelines that have low velocities and sandy substrate. Habitat having these physical characteristics can be effectively constructed in the lower Snake River reservoirs with the appropriate placement of dredged material.

Placement methods

Placement of materials may occur using one or a combination of four methods: bottom dumping from hopper barges, dozing the material from flat deck barges, hydraulic conveyance from a pump scow, and placement with a dragline.

Bottom dumping from hopper barges is the preferred placement method because it would result in the least release of turbidity and would be the most efficient, least expensive placement method. This method requires a water depth of about 8 to 10 feet, which can be a problem in shallow areas close to shore. One possible method to overcome water shallowness would be to bottom dump in deeper water and use a dragline to move the material into the desired position.

Dozing the dredged material from a flat deck barge would be similar to bottom dumping. Turbidity may be slightly higher than using a bottom dump barge for two reasons. First, material would be pushed off the barge deck in several masses compared to one mass from a bottom dump. This would allow greater contact of material with water. Second, material pushed off a flat deck barge would pass through more of the water column than a bottom dump barge. This is because material from a flat deck barge would be discharged at the surface of the reservoir while material discharged from a bottom dump barge would enter the water about 12 feet below the water surface. While water depth would still be an issue (about a 6 foot depth is required), the flat deck barge could reach shallower depths than a bottom dump barge. Moving the material a second time with a dragline would be an option for this method also.

Hydraulic conveyance is a process of liquefying the dredged material and pumping it to the desired discharge location. Depending on the material being pumped, the slurry would be about 80 percent water. This method does not have depth as a limiting factor, except that some form of underwater containment berm would need to be constructed using either bottom dumping or clamshell placement. Also, moving the floating discharge point pipeline would require a boat or crane. This method has the highest potential for turbidity, would likely require weirs between the shore and the containment berm to form cells to act as settling catchments, and would possibly require silt fence deployment.

Dragline is a method that would employ a crane and bucket for excavation of dumped material and placement in its final location in the embankment. Material would be brought to the disposal area, and likely bottom-dumped. The dragline would be positioned to reach the dumped material, scoop it up and place it in the fill.

Placement scenarios

The Corps has identified four possible placement scenarios using the placement methods described above: (1) construction of earthen cells and hydraulic placement of material within the cell; (2) silt curtain cells used with hydraulic placement; (3) a combination of silt curtain and earth embankment with hydraulic placement; and (4) placement using a bottom dump with clamshell or dragline. These are discussed below. One, or a combination of these methods may be used to construct the habitat. In addition to these scenarios, it may be advantageous to raise and/or lower the Lower Granite Pool during placement operations. For example, a deeper pool would allow barge access closer to shore. Lowering the pool may facilitate placement of the silt cap on the riparian bench.

Scenario 1 – Construction of earthen cells and hydraulic placement within the cells. This method employs all of the placement methods described above.

First, a submerged earth berm would be constructed along the outer edge of the disposal area. This would be formed by pushing dredged material off flat deck barges or bottom dump scows. A floating dragline would be set up on the inside of the earth berm. Boats would be used to position the dragline. Once the berm was constructed to a depth that precluded placement from a flat deck barge or bottom dump scows, the dumps would be made outside of the berm. The dragline would be used to scoop the dumped material and place it on top of the berm. This would be repeated until the berm was above the water surface. Cross berms would be constructed using the dragline perpendicular to shore, between the shore and the berm. This would create containment cells. Once the containment cells were complete, all remaining dredged material would be placed hydraulically. Placement would begin at the upstream cell and work downstream. It is expected that the cells would contain any turbidity that might occur during placement. Materials used for the berm construction would be mostly sand with some gravel and cobbles intermixed. The fill inside the cells would be mostly sand up to just above the water surface. The shoreline portion of each cell, which will define the riparian bench, would then be capped with hydraulically placed silt from the recreation sites and ports.

Scenario 2 - Silt curtain cells used with hydraulic placement. This would be similar to Scenario 1, except the containment cells would be formed using a geotextile fabric draped to the river bottom to act as a silt barrier. The bottom edge would be anchored if necessary. Material would be hydraulically placed within the geotextile containment cell. Placement would proceed until material within the cell was at the existing water surface. The geotextile fabric would be moved downstream and an adjacent cell would be similarly formed. This would continue for the length of the disposal area. Once the fill had been brought up to the water surface, the shoreline portion of each cell, which will define the riparian bench, would be capped with silt material from the dredging operations. A silt fence would be installed on the fill, and material would be placed hydraulically inside the silt fence.

Scenario 3 – Lower Granite pool would be raised to the maximum operating pool. Placement would be performed from flat deck barges or bottom dump scows as much as possible in the depth provided. Once the placement had reached an elevation that could not be accessed by flat deck barges or bottom dump scows, a silt curtain would be installed and a containment cell formed as discussed above. Dredged material would be placed hydraulically within the silt curtain. Once the platform within that cell reached the water surface, the silt curtain would be relocated to form the next cell. Once the fill had been brought to the water surface, the shoreline portion of each cell, which defined the riparian bench, would be capped with silt material from the dredging operations. A silt fence would be installed on the fill and silt would be placed hydraulically.

Scenario 4 - Placement using a dragline. Lower Granite pool would be raised to its maximum operating pool elevation. A dragline would dredge its way into

shore, with the material side cast in the proposed disposal area. Flat deck barge or bottom dump scow placement would be performed as much as possible in the depth provided. As the bench grows higher and the water depth becomes inadequate for dumping directly from the barge, the dumping would occur in the channel dredged by the dragline. After each dump, the dragline would excavate that material and place it in the fill. This would continue until a section of the bench was complete within the reach of the dragline. Once the riparian bench had been brought to the water surface, the silt cap would be placed as in the scenarios described above. A silt containment structure such as a silt fence or other barrier may be needed to prevent effluent from re-entering the river.

One of the dredging sites with primarily sandy material would be reserved to provide a sand source for a cap covering the shallow water resting/rearing habitat portion of the embankment. The sand would be dredged and barged to the disposal site where it would be dumped on top of the underwater portion of the embankment to form a capping layer of sand at least 10 feet thick.

Final Shaping

For all four scenarios, some underwater grading and final shaping would be required once the bench and slope are completed. The dredging contractor would perform the underwater grading and final shaping. Shaping of the in-water slopes most likely would be by floating dragline to form a flat, gently sloping (3 to 5 percent), shallow area between 10 and 12 feet in depth. A boat-towed beam may also be used. Surface shaping of the capped area would be by conventional grading equipment such as a dozer, rubber tired loader, or backhoe and would be performed sometime after the placement of the dredged material was complete and it had dried sufficiently to allow operation of equipment. Some surface undulations would be desired to provide differing root zone conditions.

Once the final shaping of the shoreline was complete, the cobbles from the navigation lock approaches would be placed around the perimeter of the bench. This would likely be performed using a clamshell and a flat deck barge. Cobbles would be brought by barge to the disposal site and the clamshell would lift the cobbles off the barge and place them in a band within the selected elevations along the shoreline.

The Corps of Engineers standard practice for contracting this type of work is to specify the environmental protection requirements and final specifications that must be met by the contractor, but let the contractor determine the exact construction methods that would be used to meet the contract requirements. Contractors are selected by lowest bid price and more restrictive placement requirements could result in higher costs. Consequently, the contract for the dredging would focus on requirements (i.e. turbidity level, work window, slope of underwater fill, placement of a silt cap) rather than placement methods to allow the contractor to be as innovative as possible. Prior to any work being performed

in the field, the successful contractor would be required to submit their work execution plan, including how they intend to meet the environmental requirements. Until the contractor submits their plan, the exact placement method is uncertain.

Sediment Type:

The RM 116 site is located in a low velocity area that has been accumulating sediment since the filling of Lower Granite Reservoir at an estimated rate of 2 inches per year. The substrate at this site was visually inspected in 1992 during a reservoir drawdown test. The substrate was observed to be primarily silt. Approximately 4 feet of silt are estimated to cover the bottom of the existing mid- to shallow depth bench.

Sediment samples were collected from the proposed dredging sites in April 2003. The results of grain size analyses conducted on these samples are shown in Table 1. The overall composition of the sediments to be dredged is expected to be less than 30% silt, and includes materials that will be suitable to provide improved substrate conditions for aquatic organisms.

The Corps performed tier IIB testing of the sediment samples and determined that some of the sediments did contain chemicals of concern, but not at concentrations that would require bioassay testing. The Corps determined that the sediments would be suitable for unconfined aquatic disposal.

COORDINATION WITH ENVIRONMENTAL AGENCIES: This activity is being coordinated with National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency (EPA), Washington Department of Fish and Wildlife, Idaho Department of Fish and Game, Washington Department of Ecology, and Idaho Department of Environmental Quality.

NATIONAL ENVIRONMENTAL POLICY ACT COMPLIANCE: The Corps' analysis of the environmental impacts associated with the proposed maintenance dredging activity is addressed in the 2002 Dredged Material Management Plan/Environmental Impact Statement, McNary Reservoir and Lower Snake River Reservoirs (DMMP/EIS); the 2003 Supplemental Environmental Analysis for Purposes of 2003-2004 Dredging (Lower Snake and Clearwater Rivers, Washington and Idaho) (SEA-03/04); and other related National Environmental Policy Act documentation. EPA was a cooperating agency in the development of the DMMP/EIS and the SEA-03/04. The Corps anticipates signing a Record of Decision (ROD) in early 2004 and will not undertake the proposed action until the ROD has been signed. For additional information on the environmental analysis, please contact Ms. Sandy Simmons at (509) 527-7265 or Mr. Jack Sands at (509) 527-7287.

WATER QUALITY CERTIFICATION: This serves as public notice that the Corps has requested Washington Department of Ecology to certify that the discharges of dredged material will not violate existing water quality standards. A copy of the Notice of Application is enclosed. Comments concerning certification for this project should be mailed to:

Federal Permit Coordination Team
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7703

Comments may also be faxed to Washington Department of Ecology at (360) 407-6902, or sent via e-mail to bmcf461@ecy.wa.gov.

The Corps intends to monitor various water quality parameters during dredging and disposal activities to ensure that state water quality standards are being met. The monitoring plan can be viewed on the Corps Web site at *www.nww.usace.army.mil/maintenance_dredging*.

CULTURAL RESOURCES: The Corps made a determination of "No historic properties affected" for the proposed 2003-2004 dredging and disposal activities. The Corps consulted with the Washington State Historic Preservation Office (SHPO), the Idaho SHPO, and other consulting parties on this matter and received concurrence with this determination. Although the scope of the proposed 2004-2005 winter dredging is the same as that identified for 2003-2004, the proposed construction dates have since changed. Therefore, the Corps will coordinate with the Washington and Idaho SHPOs to ensure cultural resources compliance is complete.

ENDANGERED SPECIES: Endangered Species Act (ESA)-listed threatened and endangered species that may be found in the project area can be divided into anadromous fish, non-anadromous fish, and terrestrial species. Of the four ESA-listed anadromous fish evolutionarily significant units present in the proposed dredging areas, one is listed as endangered (Snake River sockeye salmon) and three are listed as threatened (Snake River Fall Chinook salmon, Snake River Spring/Summer Chinook salmon, Snake River Basin steelhead). In the project area, the following may also be present: one non-anadromous fish listed as threatened (bull trout); three terrestrial species listed as threatened (bald eagle, Ute ladies' tresses, water howellia); and one terrestrial species proposed for listing (Spalding's silene).

The Corps has determined that the proposed dredging and disposal "may affect and would likely adversely effect" only individuals of the threatened anadromous species and has entered into formal consultation with the National Marine Fisheries Service (NMFS). The Corps anticipates receiving a Final Biological Opinion from NMFS in January 2004.

The Corps has determined that the proposed dredging and disposal activities "may affect, but are not likely to adversely affect" bull trout, bald eagles, Ute ladies' tresses, or water howellia, or their habitats. The Corps has also determined the proposed activities would have "no effect" on Spalding's silene. The Corps informally consulted with USFWS in 2001, 2002 and 2003 with regard to the proposed dredging and disposal activities. The USFWS concurred with the Corps' previous determinations, with the last concurrence dated September 11, 2003. Since the timing of work has changed, the Corps will check with USFWS to verify that they still concur with the Corps' determination.

EVALUATION FACTORS: The decision to perform the dredging and disposal as proposed will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effect thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.

COMMENT AND REVIEW PERIOD: Interested parties are invited to provide their comments on the proposed activity. Please provide your comments to:

Walla Walla District, Corps of Engineers
Snake River Navigation System Maintenance Team
CENWW-PM-PD-EC, ATTN: Sandy Simmons
201 N. 3rd Avenue
Walla Walla, WA 99362-1876

Comments should be postmarked no later than January 17, 2004 to ensure consideration.

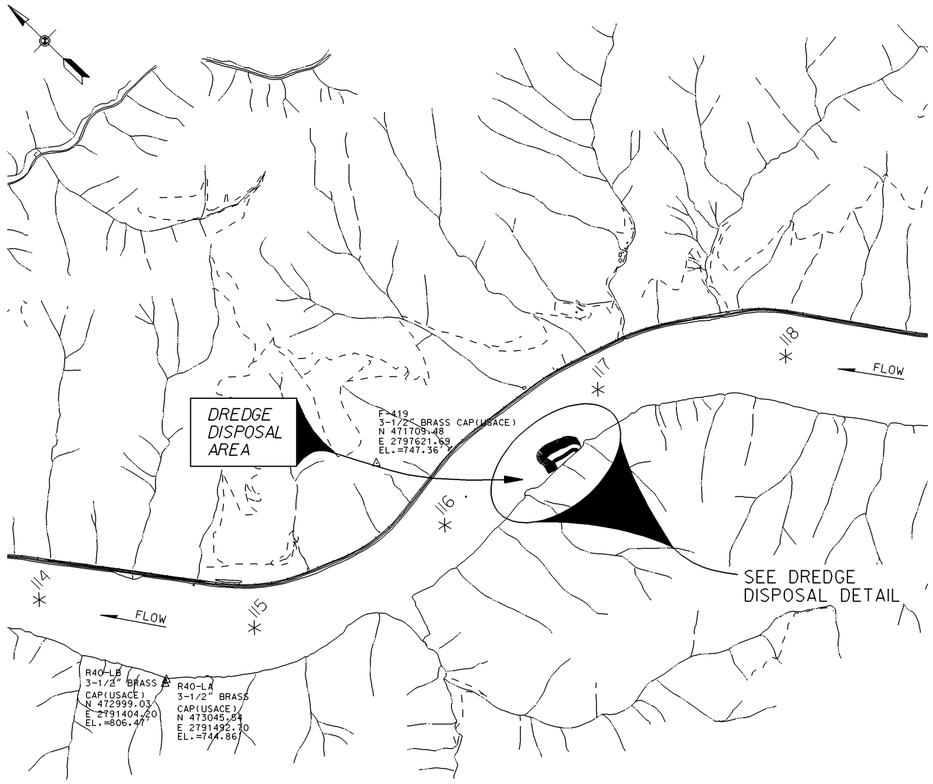
Comments may be faxed to the Corps at (509) 527-7825, attention Snake River Navigation System Maintenance Team.

Comments may also be provided through the Corps' Website at *www.nww.usace.army.mil/maintenance_dredging.*

FOR ADDITIONAL INFORMATION: Should you need additional information or have any questions, please contact Ms. Sandy Simmons at (509) 527-7265 or Mr. Jack Sands at (509) 527-7287.

PUBLIC HEARING: Any person who has an interest that may be affected by the disposal of this dredged material may request a public hearing. The request must be submitted in writing to the district engineer within the comment period of this notice and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by this activity.

Peter F. Poolman
Chief, Environmental Compliance Section



DREDGE DISPOSAL SITE - PLAN

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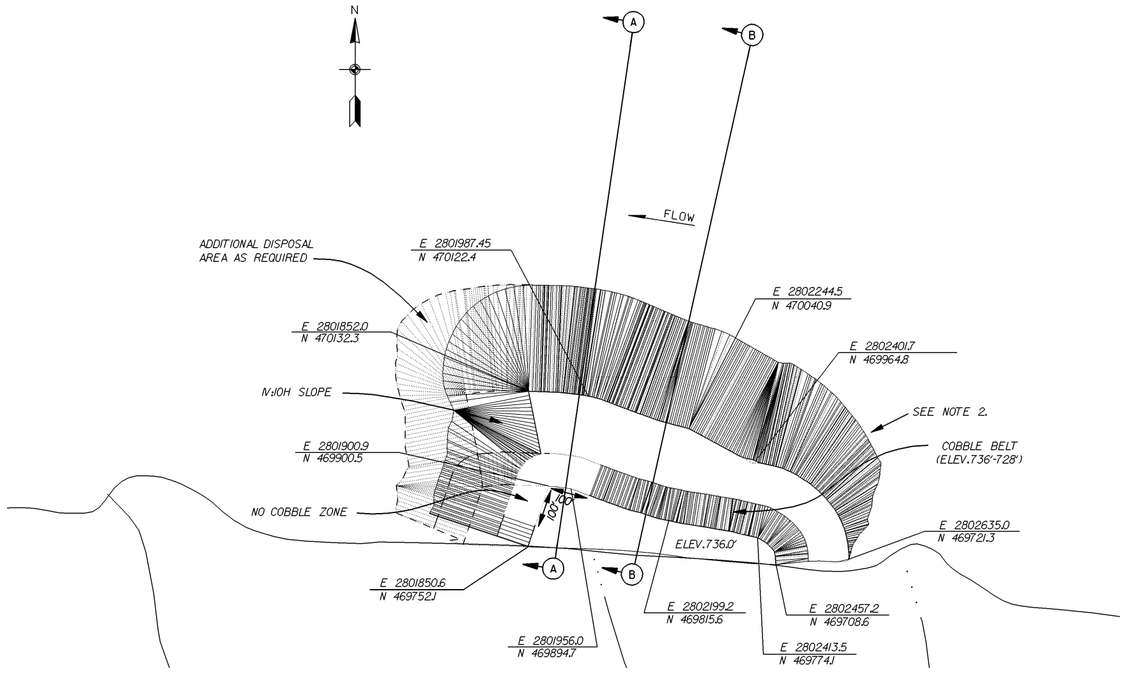

DREDGE DISPOSAL SITE - DETAIL

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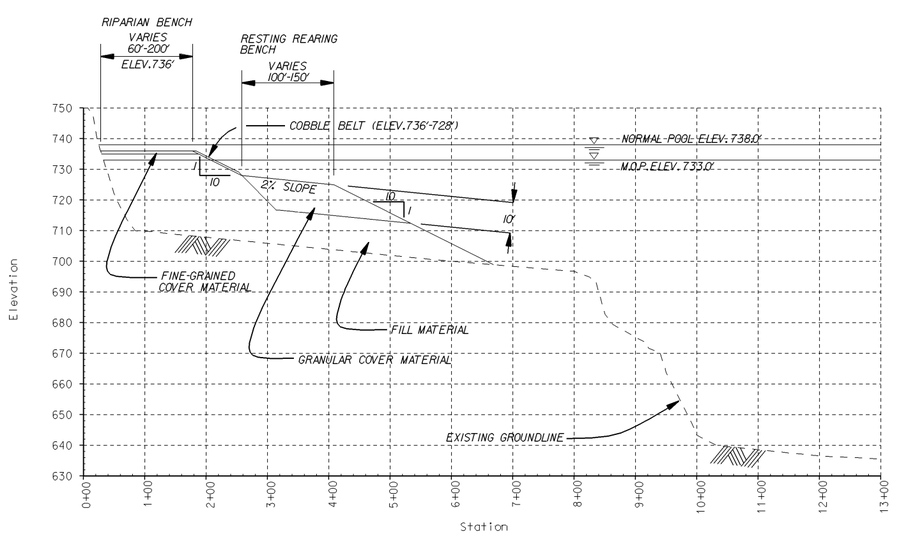

SECTION A

HORIZONTAL SCALE IN FEET
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VERTICAL SCALE IN FEET
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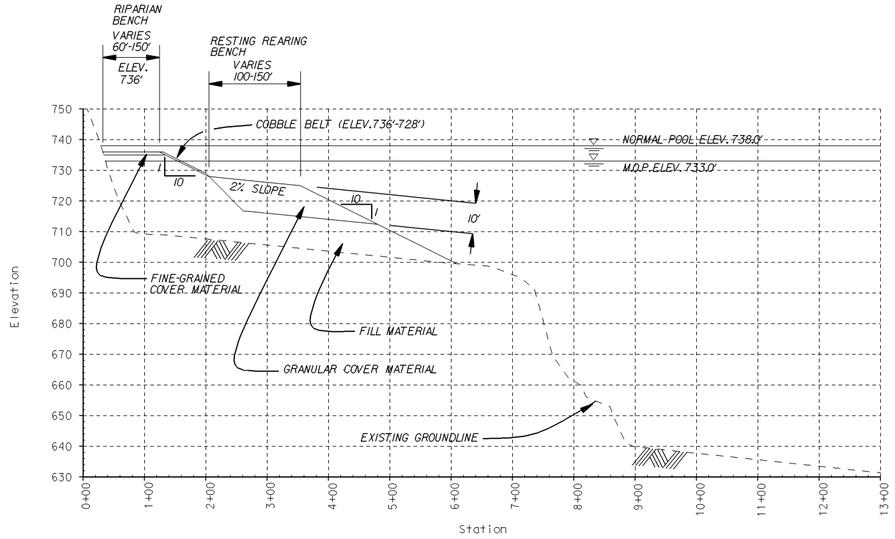

SECTION B

HORIZONTAL SCALE IN FEET
100' 0 100'

VERTICAL SCALE IN FEET
20' 0 20'

NOTE: 1. A COBBLE BELT UP TO 1FOOT (0.3048 METER) THICK WOULD BE ADDED TO THE SLOPING SHORELINE EXTENDING FROM A MINIMUM ELEVATION OF 728 FEET (221.894 METERS), MSL UP TO THE PLANTING BENCH ELEVATION OF 736 FEET (224.332 METERS), MSL.

2. ADJUST BENCH ALIGNMENT TO ALLOW SLOPE TOE TO CATCH EXISTING BENCH.

REVISION	DATE	DESCRIPTION	CHKD.	APPR.
A	6 DEC02	REVISION TO DISPOSAL SITE FOOTPRINT		

U. S. ARMY ENGINEER DISTRICT
WALLA WALLA, WASHINGTON

DESIGNED BY: MEYER	LOWER SNAKE RIVER AND CLEARWATER RIVER WINTER MAINTENANCE DREDGING 2004 - 2005 LOWER GRANITE - RIVER MILE 116 DREDGE DISPOSAL PLAN
DRAWN BY: MEYER	
CHECKED BY: SPEER	
SUPERVISED:	
CHIEF, CIVIL/SOILS SECT.	
SUBMITTED: CHIEF	APPROVED: DATE 9 AUG 2002
RECOMMENDED: CHIEF	SCALE AS SHOWN
	SHEET NO. FILE NO. FIGURE 2

COMPUTER AIDED DESIGN & DRAFTING
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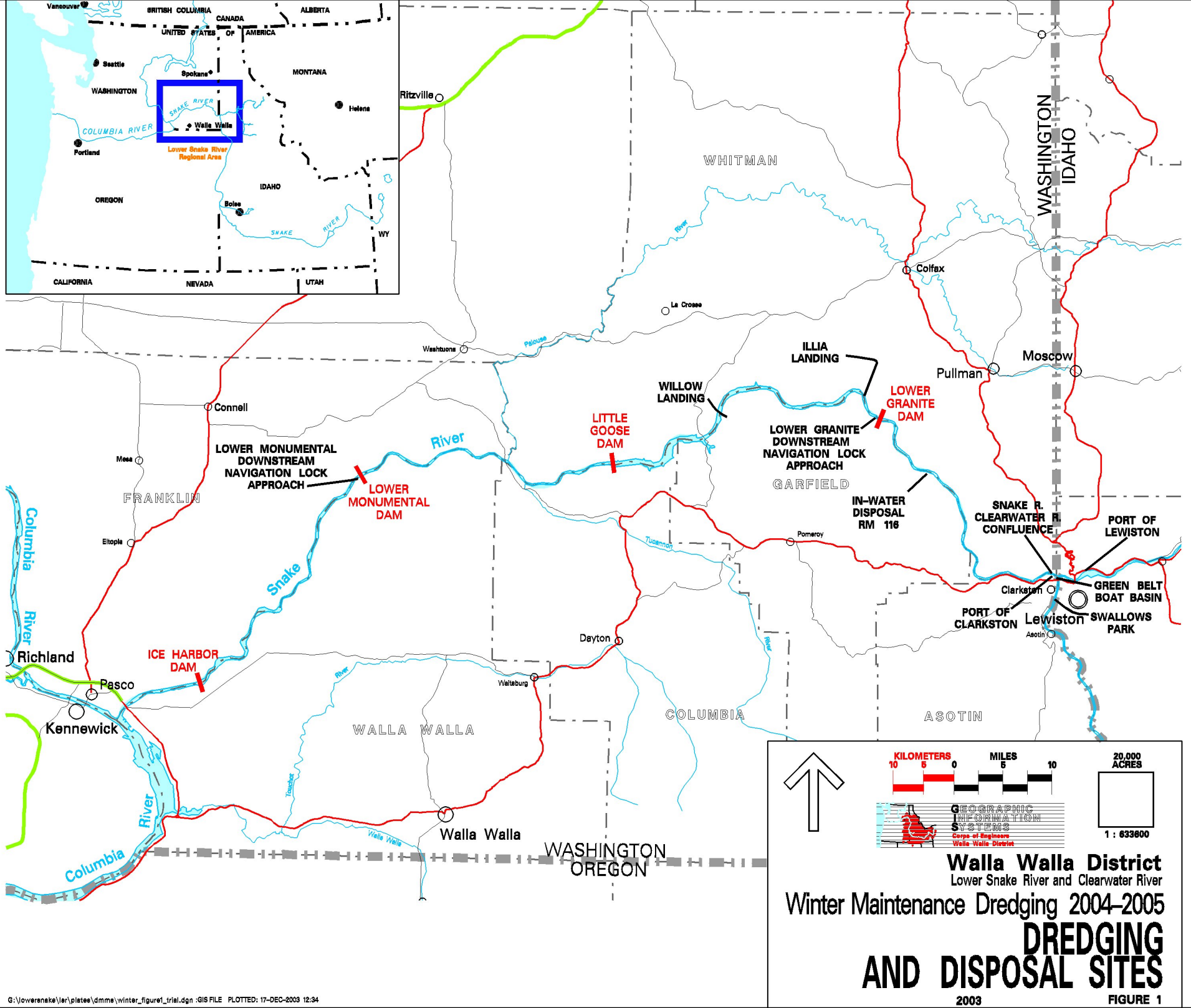
REFERENCE FILES ATTACHED

LEVELS ON FOR CONTRACT DRWGS L:\lla\CAD\dr03\figure02.dgn 10-DEC-2003 07:40



Walla Walla District

Lower Snake River and Clearwater River

Winter Maintenance Dredging 2004–2005

DREDGING AND DISPOSAL SITES

2003

FIGURE 1

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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

Notice of Application for
Water Quality Certification

Date: December 17, 2003

Notice is hereby given that a request has been filed with the Department of Ecology, pursuant to the requirements of Section 401 of the federal Clean Water Act of 1977 (PL 95-217), to certify that the project described in Corps of Engineers Public Notice No. CENWW-PM-PD-E-03-01 will comply with Sections 301, 302, 303, 306, and 307 of the Act, and with applicable provisions of State and Federal water pollution control laws.

Any person desiring to present views on the project pertaining to compliance with water pollution control laws may do so by providing written comments within 30 days of the above publication date to any of the following:

mail:	Federal Permit Coordination Team Department of Ecology P.O. Box 47600 Olympia, WA 98504-7600
fax:	360 407 6902
email:	bmcf461@ecy.wa.gov